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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/612,550	<b>Applicant(s)</b> HARRISON, DAVID RONALD	
	<b>Examiner</b> Philip C. Lee	<b>Art Unit</b> 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/8/03</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responsive to the Applicant's Election to the Restriction Requirement in the reply filed on May 3, 2007. Applicant's election without traverse of Group I, claims 1-29 is acknowledged.
2. Claims 1-29 are presented for examination and claim 30 is withdrawn from consideration.
3. This application contains claim 30 drawn to an invention nonelected without traverse. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### *Drawings*

4. Figures 1A and 1B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

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corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Objection*

5. Claims 11 (line 1), 13 (line 1), 24 (lines 1-2) and 26 (lines 1-2) are objected to because of the following informalities or grammar errors: “the protocol interpreters” should be “the plurality of protocol interpreters”. Appropriate correction is required.

6. Claims 14-27 are objected to because according to MPEP 608.01, antecedent basis for the terms appearing in the claims, while an applicant is not limited to the nomenclature used in the application as filed, he or she should make appropriate amendment of the specification whenever this nomenclature is departed from by amendment of the claims so as to have clear support or antecedent basis in the specification for the new terms appearing in the claims. Applicant will be required to make appropriate amendment to the description to provide clear support or antecedent basis for the terms appearing in the claims provided no new matter is introduced. The term “computer readable medium” is lacking clear support or antecedent basis in the description of the specification.

*Claim Rejections – 35 USC 101*

7. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claim 28 is rejected under 35 U.S.C. 101 because "A system" comprising a network analyzer (i.e., software) does not include any functional structure of a system (i.e. an apparatus). A system comprising software is considered as program per se, which is not one of the categories of statutory subject matter.

*Claim Rejections – 35 USC 103*

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-2, 14-15 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sirbu, U.S. Patent 7,062,680 (hereinafter Sirbu) in view of Hippelainen, U.S. Patent Application Publication 20020078384 (hereinafter Hippelainen).

11. As per claim 1, Sirbu teaches the invention substantially as claimed comprising:  
establishing a connection with a communications network (col. 1, lines 30-32);  
receiving, in real-time, data frames transmitted in the communications network (col. 1, lines 55-

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57, 62-65), and

analyzing the data frames that are communicated (col. 1, lines 50-65).

12. Sirbu does not teach utilizing tunneling. Hippelainen teaches analyzing the data frames are communicated utilizing tunneling ([0054], [0066], [0072]).

13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu and Hippelainen because Hippelainen's teaching of tunneling would enhance the process of analysis in Sirbu's system by allowing packets communicated utilizing tunneling to be analyzed.

14. As per claim 14, Sirbu teaches the invention substantially as claimed comprising:  
computer code for establishing a connection with a communications network (col. 1, lines 30-32);  
computer code for receiving, in real-time, data frames transmitted in the communications network (col. 1, lines 55-57, 62-65); and  
computer code for analyzing the data frames that are communicated (col. 1, lines 50-65).

15. Sirbu does not teach utilizing tunneling. Hippelainen teaches analyzing the data frames are communicated utilizing tunneling ([0054], [0066], [0072]).

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16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu and Hippelainen because Hippelainen's teaching of tunneling would enhance the process of analysis in Sirbu's system by allowing packets communicated utilizing tunneling to be analyzed.

17. As per claim 28, Sirbu teaches the invention substantially as claimed comprising: a network analyzer coupled to a communications network for receiving, in real-time, data frames transmitted in the communications network, wherein the data frames that are communicated are analyzed (col. 1, 30-32, 50-65).

18. Sirbu does not teach utilizing tunneling. Hippelainen teaches analyzing the data frames are communicated utilizing tunneling ([0054], [0066], [0072]).

19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu and Hippelainen because Hippelainen's teaching of tunneling would enhance the process of analysis in Sirbu's system by allowing packets communicated utilizing tunneling to be analyzed.

20. As per claims 2 and 15, Sirbu and Hippelainen teach the invention substantially as claimed in claims 1 and 14 above. Hippelainen further teach wherein the tunneling involves a tunnel ([0072]).

21. Claims 3-5, 10-13, 16-18 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sirbu and Hippelainen in view of Applicant Admitted Prior Art (hereinafter AAPA).

22. As per claims 3 and 16, Sirbu and Hippelainen teach the invention substantially as claimed in claims 2 and 15 above. Sirbu and Hippelainen do not specifically teach Internet Protocol tunnel. AAPA teaches wherein the tunnel includes an Internet Protocol (IP) tunnel (see Specification, page 3, last paragraph).

23. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and AAPA because AAPA's teaching of IP tunnel or any type of tunnel would increase the fields of use in Sirbu's and Hippelainen's systems by allowing packets communicated via different types of tunnel to be analyzed.

24. As per claims 4 and 17, Sirbu and Hippelainen teach the invention substantially as claimed in claims 2 and 15 above. Sirbu and Hippelainen do not specifically teach a General Packet Radio Service (GPRS) Tunnel Protocol (GTP) tunnel. AAPA teaches wherein the tunnel includes a General Packet Radio Service (GPRS) Tunnel Protocol (GTP) tunnel (see Specification, page 3, last paragraph).



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25. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and AAPA because AAPA's teaching of a General Packet Radio Service (GPRS) Tunnel Protocol (GTP) tunnel or any type of tunnel would increase the fields of use in Sirbu's and Hippelainen's systems by allowing packets communicated via different types of tunnel to be analyzed.

26. As per claims 5 and 18, Sirbu and Hippelainen teach the invention substantially as claimed in claims 2 and 15 above. Sirbu and Hippelainen do not specifically teach a Generic Routing Encapsulation (GRE) tunnel. AAPA teaches wherein the tunnel includes a Generic Routing Encapsulation (GRE) tunnel (see Specification, page 3, last paragraph).

27. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and AAPA because AAPA's teaching of a Generic Routing Encapsulation (GRE) tunnel or any type of tunnel would increase the fields of use in Sirbu's and Hippelainen's systems by allowing packets communicated via different types of tunnel to be analyzed.

28. As per claims 10 and 23, Sirbu and Hippelainen teach the invention substantially as claimed in claims 1 and 14 above. Sirbu and Hippelainen do not protocol interpreters. AAPA teaches wherein the analyzing includes executing a plurality of protocol interpreters (see Specification, page 2, second paragraph).

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29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and AAPA because AAPA's teaching of protocol interpreters would enhance the analysis of Sirbu's and Hippelainen's systems by allowing real-time parsing of protocol header in order to carry out network analysis.

30. As per claims 11 and 24, Sirbu, Hippelainen and AAPA teach the invention substantially as claimed in claims 10 and 23 above. AAPA further teach wherein the protocol interpreters include an Internet Protocol (IP) protocol interpreter (see Specification, page 3, table 3)(IP EPIs).

31. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and AAPA for the same reason set forth in claim 10 above.

32. As per claims 12 and 25, Sirbu, Hippelainen and AAPA teach the invention substantially as claimed in claims 11 and 24 above. AAPA further teach wherein the IP protocol interpreter is re-executed to accommodate the tunneling (see Specification, page 3, second paragraph; 15, fig. 1A)(calling EPIs in the order of table 3).

33. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and AAPA for the same reason set forth in claim 10 above.

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34. As per claims 13 and 26, Sirbu, Hippelainen and AAPA teach the invention substantially as claimed in claims 10 and 23 above. AAPA further teach wherein the protocol interpreters generate at least one object (see Specification, page 2, table 2)(identify and depict network object).

35. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and AAPA for the same reason set forth in claim 10 above.

36. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pathak et al, U.S. Patent Application Publication 2003/0014128 (hereinafter Pathak) in view of Hippelainen.

37. As per claim 29, Pathak teaches the invention substantially as claimed comprising:  
a user interface for receiving input from a user ([0020],[0021]); and  
enabling analysis based on the user input ([0019],[0022]).

38. Pathak does not teach tunnel analysis. Hippelainen teaches enabling a tunnel analysis based on input (interception criteria) ([0069]); wherein the tunnel analysis includes analyzing data frames that are communicated utilizing tunneling ([0054], [0066]).

39. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Pathak and Hippelainen because Hippelainen's teaching

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of tunnel analysis would enhance the process of analysis in Sirbu's system by allowing packets communicated utilizing tunneling to be analyzed.

40. Claims 6-9 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sirbu and Hippelainen in view of Pathak.

41. As per claims 6 and 19, Sirbu and Hippelainen teach the invention substantially as claimed in claims 1 and 14 above. Sirbu and Hippelainen do not teach the analyzing is conditionally performed. Pathak teaches wherein the analyzing is conditionally performed ([0019], [0022]).

42. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and Pathak because Pathak's teaching of analyzing is conditionally performed would increase the flexibility in Sirbu's and Hippelainen's systems by allowing user to provide constraints for analysis of data packets

43. As per claims 7 and 20, Sirbu, Hippelainen and Pathak teach the invention substantially as claimed in claims 6 and 19 above. Pathak further teach wherein the analyzing is conditionally performed based on user input ([0021],[0022]).

44. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and Pathak for the same reason as set forth in claim 6 above.

45. As per claims 8 and 21, Sirbu, Hippelainen and Pathak teach the invention substantially as claimed in claims 6 and 19 above. Pathak further teach wherein the analyzing is conditionally performed based on user input ([0021],[0022]).

46. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and Pathak for the same reason as set forth in claim 6 above.

47. As per claims 9 and 22, Sirbu, Hippelainen and Pathak teach the invention substantially as claimed in claims 8 and 21 above. Pathak further teach wherein the analyzing is conditionally performed for one or more types of tunnels associated with the tunneling ([0016]) based on user input ([0021],[0022]).

48. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and Pathak for the same reason as set forth in claim 6 above.

49. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sirbu, Hippelainen and AAPA in view of Pathak.

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50. As per claim 27, Sirbu, Hippelainen and AAPA teach the invention substantially as claimed in claim 26 above. Sirbu, Hippelainen and AAPA do not specifically teach objects are displayed via a user interface. Pathak teaches wherein statistics associated with the objects are displayed via a user interface ([0020]).

51. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen, AAPA and Pathak because Pathak's teaching of statistics associated with the objects are displayed via a user interface would allow user to view analysis of data packets via the user interface to identify communication errors.

### CONCLUSION

52. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (571)272-3967. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more

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information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

P.L.

A handwritten signature in black ink, appearing to read "Philip Lu". The signature is written in a cursive, flowing style with a large initial "P" and "L".